

## **REMARKS**

### **A. SUMMARY:**

The present application sets forth claims 11-13, 15, 17, 19-25, 56-57 and 59-66, of which claims 11 and 60 are independent claims. Five separate grounds of rejection were presented in the June 12, 2008 Office Action: (I) Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand allegedly directed to non-statutory subject matter. (II) Claims 11 and 60 stand rejected under 35 U.S.C. § 101 because the claimed invention allegedly lacks patentable utility. (III) Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. (IV) Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. 112, second paragraph, a being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (V) Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Marybeth Regan, "Utilizing the Internet in education", College and University, Washington: Spring 2001 Vol. 76, Iss. 4; pgs. 37-45 (hereinafter "Regan") in view of U.S. Patent No. 7,062,462 (Ireland et al.) and further in view of U.S. Patent No. 5,870,721 (Norris) and further in view of Applicant's Admitted Prior Art (AAPA). Based on the following remarks, Applicant respectfully traverses each of the above rejections and requests reconsideration and allowance of all pending claims.

### **B. REJECTION OF CLAIMS 11-13, 15, 17, 19-25, 56-57 and 59-66 AS NON-STANUTORY SUBJECT MATTER**

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand allegedly directed to non-statutory subject matter. More particularly, the June 12, 2008 Office Action points out that patents should not issue on particular business methods that depend for their

operation on human intelligence alone. The Office Action then points to the recent Federal Circuit case, In re Comiskey, 84 U.S.P.Q.2d 1670 (Fed. Cir. 2007), as supporting the proposition that both independent claims 11 and 60 do not use a machine and involve purely mental processes standing alone.

After a careful reading of In re Comiskey, it is clear that the web-based applications set forth in claims 11 and 60 do NOT correspond to purely mental processes, since under their broadest reasonable interpretation they require the use of a computer. Independent claims 11 and 60 of the subject application are highly similar in format to independent claim 17 analyzed in In re Comiskey, which was held to be directed to patentable subject matter under 35 U.S.C. § 101. When comparing the facts of In re Comiskey to the facts of this case, it is clear that claims 11 and 60 should be allowed under 35 U.S.C. § 101 as containing patentable subject matter.

The court considered two different types of claims in In re Comiskey. Independent claims 1 and 32 were directed to a “[a] method for mandatory arbitration resolution,” which were held to involve a method of using human intelligence in and of itself. Independent claims 17 and 46, however have a clearly different format, and were directed to “a system for mandatory arbitration resolution” including a plurality of “modules” including “a registration module for enrolling” a person, “an arbitration module for incorporating arbitration language,” and “an arbitration resolution module for requiring a complainant [or party] to submit a request for arbitration resolution to the mandatory arbitration system.” The court noted that claims 17 and 46, under their broadest reasonable interpretation, could require the use of a computer as part of Comiskey’s arbitration system. Id. at 1379 (citing ordinary meaning of module to be “[a] self-contained hardware or software component that interacts with a larger system,” database as “any electronically-stored collection of data,” and the related aspect associated with claims 17 and 46 that “access to the mandatory arbitration is established through the Internet, intranet, World Wide Web, software applications,

telephone television, cable, video [or radio], magnetic, electronic communications, or other communication means."

This latter group of claims (17 and 46), in contrast to purely method-based claims 1 and 32, was held to require – under their **broadest reasonable interpretation**, the use of a computer, and as such were directed to patentable subject matter under 35 U.S.C. § 101. Although In re Comiskey held that mental processes or processes of human thinking standing alone are not patentable, the court did affirm that claims involving both a mental process and one of the other categories of statutory subject matter (i.e., a machine, manufacture or composition), including claims which under their broadest reasonable interpretation require the use of a computer, claim patentable subject matter under 35 U.S.C. § 101.

Independent claims 11 and 60 of the subject application have a nearly identical format in many respects to claims 17 and 46 of In re Comiskey. Independent claims 11 and 60 are both directed to a "**web-based** application for providing a multi-level financial aid **system** featuring integrated and **automated on-line** financial aid features to a user." Clear parallels can be made between the arbitration system of In re Comiskey and the financial aid system of the subject application. Claims 11 and 60 of the subject application are clearly not method claims, since they describe the claimed invention in terms of both a system and application, both of which are structurally-described apparatus embodiments. Not only are claims 11 and 60 system-based claims, but they clearly contemplate use of a computer.

Such claims are even more clear than claims 17 and 46 of In re Comiskey that use of a computer is required to implement the claimed invention. By describing the financial aid system in terms of a "**web-based** application", it should be clear that access to the web (which requires communication access via computer, phone or some other processing device with at least some communications and processing functionality) will be required. Further, the system and application are described as "automated," which is

typically understood to mean that the system is implemented by mechanical or electronic devices as opposed to human labor, etc. As such, web-based automation according to claims 11 and 60 would reasonably require the use of electronic computing devices or the like. The system is still further described as an “on-line” system, again indicating that the system will be connected to, served by, or available through a computer or telecommunications system (such as the Internet). The web-based system applications of claims 11 and 60 have integrated and on-line financial aid features recited in terms of “services” (see, e.g., paragraph [0021] of the specification for support), similar to the general elemental use of “modules” in claims 17 and 46 of In re Comiskey.

For the same reasons and more, as described above, claims 11 and 60 clearly require, under their broadest reasonable interpretation, the use of a computer for their implementation. Dependence on processor-based functionality precludes interpretation of such claims as depending for their operation on human intelligence alone. As such, claims 11 and 60 are directed to patentable subject matter under 35 U.S.C. § 101. Applicant respectfully requests withdrawal of this pending rejection.

**C. REJECTION OF CLAIMS 11 AND 60 UNDER 35 U.S.C. 101:**

Claims 11 and 60 stand rejected under 35 U.S.C. § 101 because the claimed invention allegedly lacks patentable utility. More particularly, numbered page 4 of the June 12, 2008 Office Action alleges that “the claimed invention does not produce a tangible result, it simply describes [a] list of services without how the services are used and what they are used for, to provide a tangible and concert [sic] result.” Applicant respectfully asserts that claims 11 and 60 both particularly describe how the various services are used (i.e., how they interact with one another in the automated on-line

system) and what they are used for. In addition, both such claims provide at least one useful, tangible and concrete result, and thus satisfy the patentable utility requirements of 35 U.S.C. § 101.

With particular regard to claim 11, such claim describes the different elemental features of the web-based application for providing an integrated and automated on-line financial aid system, as the following (in part):

- “a first information collection service,”
- “a financial aid estimation service,”
- “a federal link service,”
- “a service for comparing information,”
- “a service for determining an authorized amount of financial aid,” and
- “a service for providing an award notice.”

Claim 11 particularly describes how such “services” are used, thus explicitly spelling out their utility. For example, the financial aid estimation service uses the information obtained via the first information collection service to generate a predicted amount of monetary aid available to a student. The financial aid estimation service, as well as others set forth in claim 11 and described in the specification, are embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involve sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application. Thus, the software that automatically implements the financial aid estimation service, takes input from the first information collection service, processes that data according to algorithmic rules also stored in software, and generates an estimation of available financial aid specific to a student and the given educational institution he/she is attending or planning to attend. The federal link service electronically captures additional information from a student (namely, a student ISIR document), after which point information from the first information collection service is

compared to information from the ISIR. This data comparison set forth in claim 11 helps the automated system either confirm the validity of the student's electronically inputted data or automatically initiate a request for missing information. (See, e.g., paragraph [0068] of the published application.) A final determination of authorized financial aid is obtained after the comparison and confirmation of information from a student ISIR document, in a similar fashion as described above, with application of software rule to the student input data. Finally, an award notice is provided to a student. The detailed system features set forth in claim 11 explicitly define interaction among the various software-based processing components to identify "how the services are used and what they are used for," in contrast to the characterizations in the recent Office Action.

Claim 11 also clearly provides for a "concrete, useful and tangible result." The relevant inquiry under 35 U.S.C. § 101 relative to a determination of whether an invention has practical application hinges not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible and concrete." (See Guidelines set forth in MPEP § 2106.) The result in claim 11 is the provision of an award notice to a given student based on the determination of authorized financial aid eligibility. **Such an award notice is useful** to a student because it assists the student with a determination of available loans, scholarships, grants and related sources of monetary income available to a given student. Such information is practical and useful because it helps a student determine how much he/she will have to pay out of pocket to attend an educational institution, as well as whether it will be financially feasible to attend one or more educational institutions. **The end result of providing a student with an award notice is tangible** because it produces a real-world result (specifically outputted information to a student), as opposed to some abstract concept. As described in the specification, an award notice may be a tangible paper document that is mailed to a student. Alternatively, as would be appreciated by one of ordinary skill in the art, an

award notice could be provided electronically to a student via e-mail or Internet access from the same electronic system that generated the determination of an authorized amount of financial aid. **A student award notice is concrete** (i.e., repeatable and predictable) because the provision of such a feature is facilitated by the same software processing features and implemented rules which determine aid eligibility based on inputted data for each particular student user. Because claim 11 clearly provides a useful, tangible and concrete result, Applicant respectfully requests withdrawal of the 35 U.S.C. § 101 rejection of claim 11.

Claim 60 is similar in many respects to claim 11 in that it also describes different elemental features of a web-based application for providing an integrated and automated on-line financial aid system, as the following:

- “an information collection service,”
- “a financial aid estimation service,”
- “a service for determining an authorized amount of financial aid,”
- “a service for providing an award notice,” and
- “a reporting service.”

Claim 60 also particularly describes how such “services” are used, thus explicitly spelling out their utility. For example, the financial aid estimation service and the service for determining an authorized amount of financial aid uses the information obtained via the information collection service to generate respective predicted and authorized amounts of monetary aid available to a student. The financial aid estimation service, the service for determining authorized aid, as well as others set forth in claim 60 and described in the specification, are embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involve sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application. Thus, the software that automatically implements the financial aid estimation service, takes input

from the first information collection service, processes that data according to algorithmic rules also stored in software, and generates an estimation of available financial aid specific to a student and the given educational institution he/she is attending or planning to attend. After the aforementioned steps are completed, an award notice is provided to a student, and a reporting service is made available to a given educational institution for generating reports of selected students and their respective financial aid packages. The detailed system features set forth in claim 60 explicitly define interaction among the various software-based processing components to identify "how the services are used and what they are used for," in contrast to the characterizations in the recent Office Action.

Claim 60 also clearly provides for a "concrete, useful and tangible result." The relevant inquiry under 35 U.S.C. § 101 relative to a determination of whether an invention has practical application hinges not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible and concrete." (See Guidelines set forth in MPEP § 2106.) The practical result in claim 60 is two-fold: (a) the provision of an award notice to a given student based on the determination of authorized financial aid eligibility; and (b) the provision of student aid reports to an educational institution.

**Award notices and institutional aid reports are useful** because they assist the student with a determination of available loans, scholarships, grants and related sources of monetary income available to a given student, and they assist the educational institution with information to analyze and manage various student aid parameters. **The end results of providing a student with an award notice and providing an educational institution with student aid reports are tangible** because they produce real-world results (specifically outputted information to a student and educational institution), as opposed to some abstract concept(s). As described in the specification, an award notice may be a tangible paper document that is mailed to a

student. Alternatively, as would be appreciated by one of ordinary skill in the art, an award notice could be provided electronically to a student via e-mail or Internet access from the same electronic system that generated the determination of an authorized amount of financial aid. Similarly, student aid reports may be hard-copy or soft-copy documents generated for visual access by an educational institution. **A student award notice is concrete** (i.e., repeatable and predictable) because the provision of such a feature is facilitated by the same software processing features and implemented rules which determine aid eligibility based on inputted data for each particular student user. **A generated report as set forth in claim 60 is concrete** (i.e., repeatable and predictable) because the provision of such a feature can provide reports at any educational institution employing a virtual financial aid system, by running reports on all enrolled students, admitted students, and/or interested students who have accessed the automated on-line system. Because claim 60 clearly provides a useful, tangible and concrete result, Applicant respectfully requests withdrawal of the 35 U.S.C. § 101 rejection of claim 60.

**D. REJECTION OF CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66 UNDER 35 U.S.C. 112, FIRST PARAGRAPH:**

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. More particularly, numbered pages 4 and 5 of the June 12, 2008 Office Action allege that the original specification does not describe the term “specific to a given educational institution” in such a way as to reasonably convey to one skilled in the art how to make and use the invention. Applicants respectfully traverse this assertion, and specifically identify portions of the specification discussing institution-specific application of the web-based application of claims 11 and 60 to rebut the rejection under 35 U.S.C. § 112, first paragraph.

The original specification discloses numerous instances of institution-specific features, including a general object of the invention to provide a versatile financial aid tool to a variety of different post-secondary educational institutions, including technical schools, colleges, universities and others. (See par. [0014].) Figure 1 shows the various interactive components of the subject VFAO web-based application, one of which corresponds to an SFAPC 12, which is understood to be provided for a given educational institution. The various features and system services implemented by the web-based application of claims 11 and 60 are provided to such educational institutions. In particular, “reporting systems and report generators may be provided to educational institutions for evaluating and for recording financial aid matters of its students.” (See , e.g., par. [0015].) Multiple reports can be generated related to individual students or “all students at an institution,” and including financial aid processing progress for “students at a particular institution.” (See par. [0060].) The information requested during a step of completing a user interview (corresponding to, for example, the information collection services respectively set forth in claims 11 and 60) may “vary from institution to institution” (see col. [0056], thus being institution-specific. Collected information may include personal data as well as “institution specific information such as school,... cost of tuition, books, living expenses, etc.” (See par. [0056].) The financial aid estimation service is provided to estimate federal aid as well as “institution-specific aid.” (See par. [0052].)

The exemplary instances highlighted above make it quite clear that the web-based application of claims 11 and 60 provide system features that are specific to a given educational institution. Estimates and authorized aid determinations must inherently rely on the input data associated with a given institution (described above as including school cost of tuition, books, living expenses, etc.). The reporting service described in claim 60 is clearly associated with a given educational institution because it is that institution that will generate customized reports for its particular students. These

explicit instances of disclosure make it clear that Applicant had possession of the claimed invention and also that one of ordinary skill in the art would understand that the web-based applications of claims 11 and 60 provide processing services that are specific to a given educational institution. As such, Applicant respectfully requests withdrawal of the rejection of the prior claims under 35 U.S.C. § 112, first paragraph.

**E. REJECTION OF CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66 UNDER 35 U.S.C. 112, SECOND PARAGRAPH:**

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. 112, second paragraph, a being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, numbered page 5 of the June 12, 2008 Office Action alleges the following:

“Claim 11 and 60, beside being a descriptive material (computer per se), have missing steps for example ‘a service for comparing,’ where is the result of such comparing and where is the result used? Similarly for other services with intended use “for” clauses, where the claims do not positively indicate the next step which uses the result of the service (do not claim any functionality which uses the information). The claimed language has missing step which create gap in the process of the invention for concrete and tangible result.”

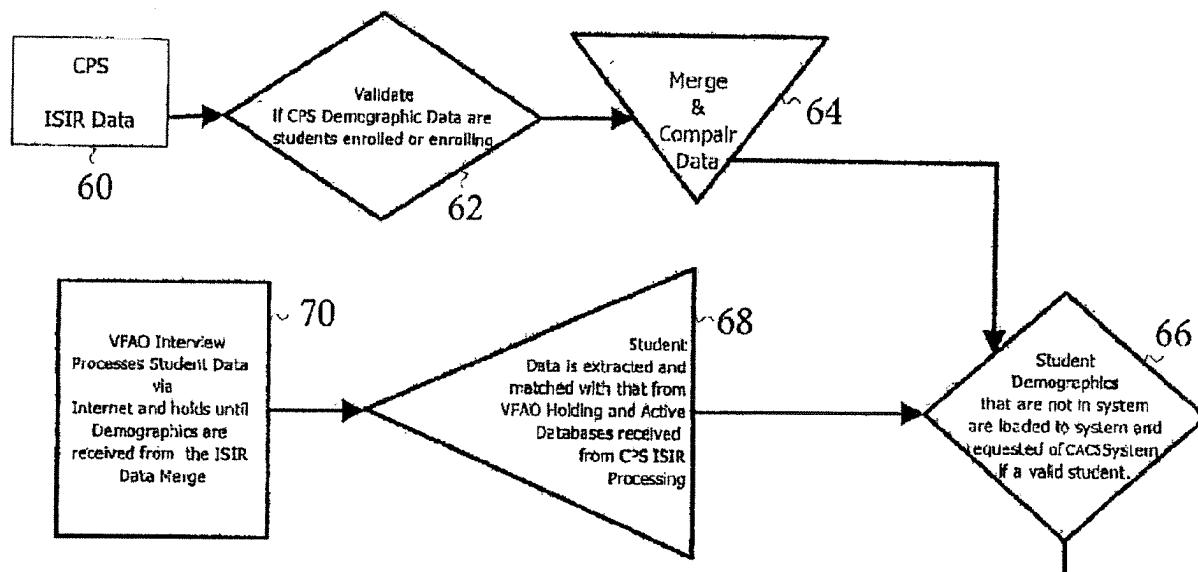
The Examiner’s argument above is unclear in the sense that it discusses whether the invention has a concrete and tangible result, which relates more to patentability under 35 U.S.C. § 101 as opposed to 35 U.S.C. § 112. To the extent that the above language is intended to be concerned with patentable utility issues under 35 U.S.C. § 101, Applicant refers to and incorporates by reference the arguments already set forth above outlining how claims 11 and 60 are clearly directed to patentable subject matter, and also provide for a useful, tangible and concrete result. The remainder of the remarks in

this section address issues under 35 U.S.C. § 112, second paragraph, and explain the particular reasons Applicant traverses this rejection.

The specific portion of the second paragraph of 35 U.S.C. § 112 apparently relied on by the Examiner corresponds to the requirement that “the claim(s) particularly point out and distinctly claim the invention.” According to MPEP §§ 2106 and 2171, “[a]n application fails to comply with … [this] requirement when the claims do not set out and define the invention with a reasonable degree of precision and particularity. In this regard, the definiteness of the language must be analyzed, **not in a vacuum, but always in light of the teachings of the disclosure as it would be interpreted by one of ordinary skill in the art**” (emphasis added). In direct contravention to the specific MPEP Examination Procedures referenced above, the Examiner appears to have considered claims 11 and 60 in a vacuum.

Based on the language explicitly provided in claim 11, and described in relevant part in the specification, one of ordinary skill in the art would clearly understand the interaction among the given system processing services set forth in such claim. For example, the financial aid estimation service of claim 11 is particularly described as evaluating the information obtained via the first information collection service to generate a predicated amount of monetary aid for a student. By reading the specification, one of skill in the art would understand that the financial aid estimation service is embodied in a unique system of software and processing (see paragraph [0045] of the published application), which involves sophisticated algorithms, rules engines and software available in a processing center (e.g., SFAPC 12) – see paragraph [0046] of the published application. Thus, software that automatically implements the financial aid estimation service, takes input from the first information collection service, processes that data according to algorithmic rules also stored in software, and generates an estimation of available financial aid specific to a student and the given educational institution he/she is attending or planning to attend.

The “service for comparing” feature of claim 11 clearly indicates that the compared information corresponds to the “information obtained via said first information collection service and the given student’s ISIR document [obtained via the federal link service].” When viewing this service, not in a vacuum but in light of the specification, exemplary aspects of such a comparison are revealed. For example, Figure 5 (a relevant portion of which is shown below) shows how automated processing effected via the comparing service of claim 11 merges and compares the student information and related ISIR data.



**Part of Figure 5 of the Subject  
Application (USSN 10/054,689 (Weber)**

As more particularly described in paragraph [0068] of the specification, VFAO system 10 preferably receives student interview data via the Internet at step 70, and then sends that data to either a holding database or an active database until additional demographic information is received. This additional information is typically in the form of an ISIR, and when received, all information is merged. In step 68, any data that is

received from CPS ISIR processing is then matched with data extracted from active and holding databases in the VFAO application. CPS and ISIR data 60 is then validated in step 62 depending on whether a student is enrolled or is enrolling at that educational institution. Step 64 merges and ensures correct comparison of this validated ISIR information with a student's interview information, and student information is then stored in an active status database.

The above-described "service for comparing" leads right into the subsequently described "service for determining an authorized amount of financial aid" because official authorized financial aid determinations must inherently depend on the accuracy of student information, which is compared (i.e., for validation purposes) in the prior "service for comparing." As particularly described in paragraph [0041] of the original specification, "once all required information for a student's file is received, the student financial aid processing center begins an extensive and particular process of reviewing a student's file. Preliminary review establishes verification of required documents, and quality control assures that established criteria are met for each reviewed student. Once a file is completely reviewed, loans and other aid can then be certified. As such, there is a clear correlation between the service for comparing information and the subsequently recited service for determining authorized (e.g., certified) amounts of aid. The final service set forth in claim 11 – "a service for providing an award notice to the given student" – particularly describes that such award notice is based on the previous determination of authorized financial aid eligibility, thus correlating this last step to the previous.

The language itself in claim 11 provides enough information for one of ordinary skill in the art to understand the particulars of the claimed invention. When further viewed, as required by law, in light of the specification (as opposed to in a vacuum), one of ordinary skill in the art would understand not only the particulars of the claimed invention, but how such services may particularly be implemented, for example, with the

processing steps illustrated in and described with reference to Figs. 4 – 7, respectively. For this reason, Applicant requests withdrawal of the pending rejection of claim 11 under 35 U.S.C. § 112, second paragraph. The arguments above can be similarly applied to independent claim 60. As such, claim 60 also particularly points out and distinctly claims the invention and thus satisfy all requirements of 35 U.S.C. § 112, second paragraph.

**F. REJECTION OF CLAIMS 11-13, 15, 17, 19-25, 56-57 AND 59-66 UNDER 35 U.S.C. 103(a):**

Claims 11-13, 15, 17, 19-25, 56-57 and 59-66 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Marybeth Regan, "Utilizing the Internet in education", College and University, Washington: Spring 2001 Vol. 76, Iss. 4; pgs. 37-45 (hereinafter "Regan") in view of U.S. Patent No. 7,062,462 (Ireland et al.) and further in view of U.S. Patent No. 5,870,721 (Norris) and further in view of Applicant's Admitted Prior Art (AAPA).

With regards to claims 11 and 60, the Examiner has aptly acknowledged the many deficiencies of Regan as a base reference. More particularly, as indicated on numbered pages 6 and 7 of the June 12, 2008 Office Action, "Regan does not explicitly disclose [the following elements of claim 11:]

a financial aid estimation service for evaluating the information obtained via said first information collection service and generating a predicted amount of monetary aid that may be available for the student to use for education-related expenses at a given educational institution;

receiving an electronic copy of an Institutional Student Information Report (ISIR) document for the given student;

a service for comparing information obtained via said first information collection service and the given student's ISIR document;

a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution; and

a service for providing an award notice to the given student based on the determination of authorized financial aid eligibility.”

Any attempt to cure the deficiencies of Regan by reference to “well known elements” is improper and fails to establish a *prima facie* case of obviousness. On numbered page 7 of the recent Office Action, the Examiner alleges that such features as “Student/loan financial aid process, FAFSA and Institutional Student Information Report (ISIR) are well known elements and ISIR is send/received by schools electronically as well as paper copy. Further, are known means of file transfer (receiving/transmitting) using Internet FTP and computers, where FTP uses the address (link) of the web-server to receive/transmit files (documents, reports, etc.), batch programming and telnet for automation of computer processing and viewing documents.” It is not clear to Applicant how these general statements about alleged “well known elements” help cure the deficiencies of Regan since none of these alleged features speak directly to the specific elements set forth in claim 11 or other pending claims. To the extent that such features are relied upon for alleged disclosure of claimed features, Applicants respectfully traverse any such alleged support for rejection in accordance with MPEP § 2144.03. Applicant further requests that the Examiner provide documentary evidence in support of all statements regarding well known or inherent prior art, if the Examiner wishes to proceed with a formal position regarding such statements. More importantly, Applicant notes that none of such referenced features speak to the specific elements set forth in claim 11, and as such these features fail to cure the deficiencies of Regan.

The various deficiencies of Regan discussed above cannot be cured by Ireland et al. because this reference is not directed to the actual processing of financial aid

applications, but only to the provision of an interface for viewing and analyzing previously processed award packages to a student. For instance, in col. 6, lines 20-34, Ireland et al. disclose how it is still the responsibility of a school administrator to generate a financial aid package and preferably mail a letter to a potential student containing an announcement of the financial aid package. The viewing of the package by a student or parent may then occur upon accessing a given URL address and supplying a user name and password. Ireland et al. provides a plethora of features that may be utilized to view award packages, predict loan repayment amounts, etc. but such reference still does not disclose a method for the actual processing of such awards as set forth in claims 11 and 60 of the subject application. More specifically, processing features set forth in claim 11 not sufficiently described in Ireland et al. include respective services for obtaining personal and financial information about a given student, receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student, comparing the student's personal and financial information with the ISIR information, and determining an authorized amount of financial aid the student is eligible for (as opposed to a separate previously estimated amount).

Even if Ireland et al. disclosed all elements of claim 11, the combination of such reference with Regan is improper because the disclosures of both Regan and Ireland et al., when considered in their entirety, actually teach away from such a proposed combination.

When considering whether a proposed combination of references is proper under 35 U.S.C. § 103(a), the prior art “must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” See MPEP § 2141.02 (quoting from W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), cert denied, 469 U.S. 851 (1984), emphasis added. Even after the recent Supreme Court decision in KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_, 82 U.S.P.Q. 2d 1385, 1397 (2007), a prior art reference

**that “teaches away” from the claimed invention is a significant factor to be considered in determining obviousness.** (See MPEP § 2145, emphasis added.) Specifically, it is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983), emphasis added.

The proposed prior art references Regan and Ireland et al., when considered in their entirety, explicitly teach away from their combination. With regard to an information collection service for obtaining personal and financial information about a given student, Regan appears to rely on other sources for gathering such information (separate Web-based admissions protocols and general FAFSA documents). Similarly, Ireland et al. relies on a school's financial aid office to gather this requested information. Ireland et al. teaches away from using such information gathering features (of claim 11 and as allegedly disclosed in Regan) when it distinguishes itself from known on-line websites that require a user to input all information necessary for obtaining a cost projection. (See col. 2, lines 53-59 of Ireland et al.) Applicants note that in accordance with §2141.03 of the MPEP, prior art must be considered in its entirety, including disclosures that teach away from the claims. In contrast, features for the collection of such information and the financial aid estimation service for calculating an amount of aid eligibility based on such collected information is not disclosed in Regan or Ireland et al. Even if such features were disclosed in Regan, the combination with Ireland et al. is improper because Ireland et al. discloses that such financial aid processing features are handled by school administrators who utilize the system of Ireland et al. to help students view and analyze already processed financial aid packages. (See col. 6, lines 21-34 of Ireland et al.) Because the objectives of Ireland et al. teach away from the inclusion of information gathering features with other aspects of post-processing award display, Ireland et al. teaches away from combination with Regan or similar references. Since

Ireland et al. teaches away from such a combination, the proposed modification of Regan to include features of Ireland et al. is improper.

The recent Office Action further attempts to cure the deficiencies of Regan (and Ireland et al.) with background information set forth in the subject application. More particularly, the Examiner alleges on numbered page 8 of the Office Action that “[Applicant’s Admitted Prior Art (AAPA)] discloses evaluating the information received via said first information collection service; a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution.] This is an improper characterization of what is disclosed in the Background of the Invention section of the subject application, and Applicant respectfully submits that such disclosure clearly does NOT correspond to the elements set forth in claim 11.

The Background of the Invention section of the subject application generally describes the cumbersome manual interaction that often existed in a school’s financial aid office before provision of the subject Virtual Financial Aid Office (VFAO) technology. Instead of prior arrangements described there, the entire system and process by which a student goes about obtaining financial aid is transformed by the subject VFAO technology. By providing an integrated on-line web-based application, a student is now capable of undergoing an online student interview process by which personal, demographic and financial information can be provided in a secure portal, using high bit-level encryption, protection from third-party intrusion and the like. Additional automated online tools and resources are also available, where they weren’t before. For example, a student is provided with instant access to the platform (after completing an automated online PIN application) to provide additional updated information, and also to obtain a financial aid estimate (via the financial aid estimation service tool) before actual authorized aid packages are processed. Specific algorithms and rules engines are implemented via software to perform various processing steps including

interview processing, file review, aid determination and quality control (see steps and discussion relative to Figures 4-7, respectively).

None of the above automated, computer-based features are discussed as admitted prior art in the subject application. In contrast, the various embodiments of the invention, not the prior art, are described in the subject application as including the features set forth in claim 11. In particular, three of the important steps in automated aid processing as set forth in claim 11 include: a service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student; a service for comparing information obtained via said first information collection service and the given student's ISIR document; and a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution. None of these are disclosed in the Background section, nor could any of these be part of a "web-based application" that provides "integrated and automated on-line financial aid features" to a user since the only financial aid interaction discussed in the Background involved a different sort of manual interaction among entities involved in the traditional financial aid process. As such, AAPA fails to cure the many deficiencies of Regan and Ireland et al.

The recent Office Action further attempts to cure the deficiencies above with the disclosure in U.S. Patent No. 5,870,721 (Norris), in which loan approval technology is argued as analogous to the specific steps of claim 11. Applicant respectfully submits that Norris still fails to disclose all elements of claim 11, thus cannot cure the deficiencies of the other base references. Furthermore, Norris et al. is nonanalogous prior art that is completely devoid of reference to student financial aid, and only involves general aspects of loan processing. The unique requirements and considerations of student-based financial aid, that are independent from and unique relative to general loan processing, provide a basis precluding one of ordinary skill in the art from logically

commending the Norris disclosure to his attention in considering the invention of claim 11 as a whole.

Norris fails to disclose all elements of claim 11. Numbered page 8 of the June 12, 2008 Office Action asserts that “Norris discloses receiving an electronic copy of loan document or borrower (analogous to an Institutional Student Information Report (ISIR) document for the given student); a service for comparing information obtained via said first information collection service (database – analogous service) and the given borrowers loan application/document (analogous to student’s ISIR document).” It seems apparent not only from the Norris patent itself, but even from the Examiner’s characterization of such reference, that Norris doesn’t have anything to do with receipt of student aid information and subsequent processing thereof.

In particular, claim 11 recites an automated on-line “federal link service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for a given student.” Norris doesn’t once mention anything about applying its loan processing techniques to students, nor does it mention anything about ISIR documents, both of which are of particular importance to the automated processing in claim 11. Since Norris fails to disclose an automated service for receiving a student ISIR document, a feature that was not disclosed in Regan, nor Ireland et al., nor in AAPA, this feature of claim 11 is still not disclosed in the cited art. A prima facie case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited art discloses a federal link service for receiving an electronic copy of an ISIR for a given student.

In addition, claim 11 recites “a service for comparing information obtained via said first information collection service and the given student’s ISIR document.” None of the cited references discloses receiving a student ISIR document, so none of the cited references are capable of disclosing information contained in such an electronic document. Norris doesn’t relate to student aid, nor does it disclose information on an

ISIR document, so Norris again fails to cure this particular deficiency of Regan, Ireland et al. and AAPA relative to claim 11. A *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited references discloses an automated service for comparing information obtained via said first information collection service and the given student's ISIR document.

Still further, claim 11 recites a "service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution." As discussed above, neither Regan nor Ireland et al. discloses this feature. Norris fails to cure this deficiency for many clear reasons. Norris does not analyze student aid, and gives no apparent consideration to the requirements for "authorization" that uniquely apply to student aid as opposed to general loans for other reasons. As indicated in claim 11, eligibility is tied to a given educational institution. Since Norris doesn't involve students or student financial aid, Norris does not disclose and has no reason to consider the special factors required to analyze institution-specific eligibility for student funds – including but not limited to cost of tuition, books, living expenses, full-time vs. part-time student status, verification of student enrollment, availability of scholarships, grants and other NON-LOAN financial aid, etc. Norris does not disclose determining an authorized amount of student financial aid for a student because none of the student-specific analytical requirements are analyzed in Norris. Norris does not disclose determination of eligible student aid for a given educational institution because Norris doesn't consider specific schools or information related to a school sufficient to determine what a student may or may not be "eligible" for at a specific institution. A *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been met because none of the cited art, including Norris, discloses a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution.

Not only does Norris fail to disclose all elements of claim 11 (as outlined above), but such reference should not be relied upon under 35 U.S.C. § 103 because it is nonanalogous art. MPEP § 2141.01(a) requires that a reference must be analogous prior art to rely on the reference under 35 U.S.C. § 103. In particular, a reference in a field different from that of applicant's endeavor may be reasonably pertinent only if "it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his or her invention as a whole." Norris does not deal at all with student financial aid technology, and thus constitutes nonanalogous art in a different field of endeavor. There are many factors and considerations unique to the processing of student financial aid – e.g., institution-specific cost of tuition, books and student housing, federal loan limits, ISIR verification requirements, etc. – that would be ignored if general loan processing techniques were applied. As such, an inventor or other person of ordinary skill in the art would not have blindly applied general loan processing techniques to the student financial aid technology set forth in claim 1. Since there is no logical basis for which the inventor would have considered Norris, such reference is not reasonably pertinent, and the reference is improper as nonanalogous art as described in MPEP § 2141.01(a).

The combination of Regan, Ireland et al., AAPA and Norris fails to provide a *prima facie* case of obviousness under 35 U.S.C. § 103(a). All references fail to disclose the following elements of claim 11: a federal link service for receiving an electronic copy of an Institutional Student Information Report (ISIR) document for the given student; a service for comparing information obtained via said first information collection service and the given student's ISIR document; and a service for determining an authorized amount of financial aid the given student is eligible for at the given educational institution. Combining Ireland et al. to cure the deficiencies of Regan is improper because Ireland et al. teaches away from the gathering of information for aid processing and the actual processing itself, and only focuses on post-processing aid

viewing by a student. Combining Norris to cure the deficiencies of Regan and Ireland et al. is improper because Norris is not analogous prior art, as required under MPEP § 2141.01(a). As such, Applicant respectfully requests withdrawal of the obviousness rejection of independent claims 11 and 60.

With regard to claims 12-13, 15, 17, 19-25, 56, 57 and 59, such claims depend from otherwise allowable claim 11 and further limit such independent claim. Similarly, claims 61-66 depend from otherwise allowable claim 60 and further limit such independent claim. If an independent claim is nonobvious under 35 U.S.C. § 103(a), **then any claim depending therefrom is nonobvious.** *In re Fine*, 387 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1998), emphasis added. Since claims 11 and 60 should be allowed over the cited art, so should claims 12-13, 15, 17, 19-25, 56, 57, 59 and 61-66. Applicants respectfully request acknowledgement of allowance.

**ADDITIONAL EVIDENCE OF NON-OBVIOUSNESS:**

Applicant believes that the above arguments provide a clear basis for explaining how the cited references fail to disclose all elements set forth in the presently pending claims, which should be enough in and of itself to successfully traverse the present rejection under 35 U.S.C. § 103(a). As even further support to rebut such obviousness allegations, specific objective evidence of non-obviousness was previously presented in the form of commercial success of the invention. Such evidence must be considered by the Examiner in any determination of patentability. It is not clear from the recent Office Action that the Examiner has given this evidence its due consideration. The only mention of such previously submitted evidence in the June 12, 2008 Office Action was on numbered page 2, where the Examiner noted that "Applicant's Declaration Under 37 C.F.R. § 1.132 is entered and has been considered, but it does not place the application in condition for allowance, see below." Just because other non-§103 rejections were set forth in the recent Office Action, the Examiner cannot ignore the evidence of

secondary considerations submitted by Applicant. With regard to the pending §103 obviousness rejection that still stands, Applicant respectfully submits that the Examiner consider such evidence, as clearly mandated by recent Supreme Court case law in *KSR International Co. v. Teleflex, Inc.*.

The U.S. Supreme Court case of *KSR International Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 82 USPQ 2d 1382 (2007) affirmed that objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. Such objective evidence, referred to as "secondary considerations," was identified in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966) as including evidence of commercial success, long-felt but unsolved needs, failure of others, and unexpected results. The Court of Appeals for the Federal Circuit stated in *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) that "evidence rising out of the so-called 'secondary considerations' must always when present be considered en route to a determination of obviousness" (emphasis added). (See also MPEP §716.01(a).)

Not only does the cited prior art fail to disclose all elements set forth in the subject claims, but it would not be obvious to combine these references in rendering the presently claimed invention unpatentable. Particular evidence of this non-obviousness was previously submitted in the form of a declaration by sole inventor Harry V. Weber, who is President of Weber & Associates, Inc., the assignee of the subject application. Such objective evidence identifies commercial success of the subject technology as a pertinent secondary consideration relevant to any current determination of obviousness of the present claims.

The previously submitted declaration is provided under 37 C.F.R. §1.132 as objective evidence of commercial success of a technology offered by Weber & Associates Inc. referred to as their Virtual Financial Aid Office (VFAO) technology. The web-based application for providing a multi-level financial aid system disclosed in the subject application and set forth in the presently pending claims is generally

synonymous with the commercial embodiments of Weber & Associates' VFAO technology currently provided and with commercial embodiments provided to its customers since July 1, 2001. Since its complete inception in mid-2001, Weber & Associates has offered its VFAO technology for sale to institutions of higher education, including colleges and universities throughout the country. During the time period from mid-2001 until present, over thirty-five (35) different colleges and universities have purchased and used the VFAO technology provided by Weber & Associates, Inc. and have implemented it for use in over eighty (80) different locations in various states throughout the nation. This commercially successful product has generated over \$16.5 million dollars in sales for Weber & Associates from July 1, 2001 until present. The commercial success of the VFAO technology, synonymous with that described by the present claims, is deniably astounding and should thus be given substantial consideration in finding the present claims non-obvious.

The commercial success of the subject technology has not only been realized by the assignee, but also for the educational institutions who have implemented the subject technology. Several of such institutions provide online degree programs and so having an integrated on-line web-based application for providing financial aid services to their students has been critical to their continued ability to function in today's competitive world of higher education. Multiple such institutions have doubled their total number of students during the time period in which VFAO technologies were provided to such institutions, and have thus recognized the value of the VFAO technology to their growth.

Applicant respectfully submits that the subject web-based application for providing integrated on-line financial aid features, as set forth in present claims 11-13, 15, 17, 19-25, 56-57, 59 and 60-66, is not obvious in light of the presently submitted objective evidence of the remarkable commercial success of Applicant's virtual financial aid office technology. Applicant respectfully requests acknowledgement of this non-obviousness.

**CONCLUSION:**

Inasmuch as all outstanding issues have been addressed, Applicant respectfully submits that the present application, including claims 11-13, 15, 17, 19-25, 56-57, 59 and 60-66, is in complete condition for issuance of a formal Notice of Allowance, and action to such effect is earnestly solicited. Applicant invites the Examiner to telephone the undersigned at his convenience should only minor issues remain after consideration of this response in order to permit early resolution of the same.

Respectfully submitted,

DORITY & MANNING,  
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